

NX70 Installation Instructions High Performance Pulse Output Counter Module

Catalog Number: NX70-PULSE4

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Important User Information

Solid state equipment has operational characteristics differing from those of electromechanical equipment. Because of this difference, and also because of the wide variety of uses for solid state equipment, all persons responsible for applying this equipment must satisfy themselves that each intended application of this equipment is acceptable.

In no event will OE Max Controls be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, OE Max Controls cannot assume responsibility or liability for actual use based on the examples and diagrams.

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Throughout this manual we use notes to make you aware of safety considerations.

WARNING 	Identifies information about practices or circumstances which may lead to serious personal injury or death, property damage, or economic loss.
IMPORTANT	Identifies information that is critical for successful application and understanding of the product.
ATTENTION 	Identifies information about practices or circumstances that can lead to minor personal injury, property damage, economic loss, or product malfunction. However, depending on situation, failure to follow the directions accompanying this symbol may also lead to serious consequences.

Safety Instructions

Please read this manual and the related documentation thoroughly and familiarize yourself with the directions before installing, operating, performing inspection and preventive maintenance. Make sure to follow the directions correctly to ensure normal operation of the product and your safety.

WARNING



- If this product is used in a situation that may cause personal injury and/or significant product damage, implement safe measures such as use of fault-safe equipment.
- Do not use this product under any conditions exposed to explosive gases. It may cause an explosion.



ATTENTION



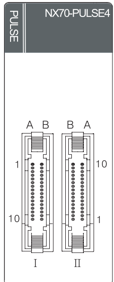
- Please fasten cables with terminal bolts.
- Do not use the product under conditions that do not meet correct environmental standards.
- Make sure you connect grounding cables.
- Do not touch terminals when electric current is flowing.

Overview

Features

NX70 PLC Pulse I/O unit is a special unit that provides easy implementation of pulse output and high-speed counter functions.
The main features of pulse I/O unit include the following.

Pulse I/O unit provides high-speed counter functions with various other functions as follows:



NX70 PLC
Pulse output unit
(NX70-PULSE4)

- It operates as mixed I/O unit.
- Set the effective pulse width of input signal.
- Count pulse number.
- Compare pulse number and set value and output the results.
- Pulse output.
- PWM output.

Pulse output and PWM output are only available to pulse I/O unit. Be careful because this function is NOT available for High-performance High-speed counter unit (4CH).

System Configuration Without Losses

Unit I/O terminals that are not allocated to any function can be used for general I/O terminal, which enables a single high-speed counter unit to be used both for counter function and sensor input, providing system configuration without system resource loss.

Easy location control with a single pulse I/O unit.

Pulse I/O unit provides pulse output function. Output pulse is feedback to unit, providing easy location control with a single unit.

Four 0.8A Outputs

Specifications

Performance Specifications List

General Specifications

Item		Specifications
Temperature	Operating	0 °C to +55 °C (32 °F to 131 °F)
	Storage	-25 °C to +70 °C (-13 °F to 158 °F)
Humidity	Operating	30 to 85% RH (Non-condensing)
	Storage	30 to 85% RH (Non-condensing)
Withstand voltage		500V AC for 1 minute, between each pin<-> groundings of external connectors (Except F and E terminals) (F and E terminals: connector shield cables)
Insulation resistance		100 MΩ or more at 500 mega V dc between each pin <-> groundings of external connectors (But except F and E terminals) (F and E terminals: connector shield cables)
Vibration immunity		10 to 55 Hz, 1 cycle/minute: double amplitude of 0.75mm, 10 minutes on 3 axis (X, Y, Z)
Shock immunity		Peak acceleration and duration 98 m/s^2 or more, 4 times for each X, Y, Z direction
Noise immunity		1500Vp-p with 50ns to 1 μs pulse width (generated by noise simulator)
Ambience		No corrosive gas, no excessive dust

I/O Specifications

Common Specifications

Item	Pulse I/O unit (NX70-PULSE4)
Occupied I/O points	Input 32 points, output 32 points
Internal Current Consumption	500 mA or less (DC 5V)
Operation Indicator	32-point LED
External connection method	Connector (One MIL standard 40P connector)
Weight	Approx. 130g

Input Specifications

Item			Pulse I/O unit (NX70-PULSE4)
Input	Isolation method		Photocoupler
	Rated input voltage		24V DC
	Rated input current		Approx. 7.5 mA (at 24V DC)
	Input impedance:		Approx. 3.2 KΩ
	Use voltage range		20.4V DC to 26.4V DC
	Min. ON voltage/current		19.2V DC/6 mA
	Max. OFF voltage/current		5.0V DC/1.5 mA
	Response time * 1	OFF → ON	1 μs or less
		ON → OFF	2 μs or less
	Input time constant setting		N/A, 4 μs, 8 μs, 16 μs, 32 μs (2 input unit setting)
	Common method		16 points/Common (+Common)
Counter	Number of counter channels		4 CH
	Counting range		32-bit signed (-2,147,483,648 to +2,147,483,647)
	Max. counting speed *1		200 kHz
	Input mode		3 modes (Direction control, individual input, phase input)
	Min. input pulse width *1		2.5 μs
	Others		Comparison output 8 points, multiplication (1, 2, 4)

*1. This value applies when input time constant (filter) is set to N/A.

Output Specifications

Item			Pulse I/O unit (NX70-PULSE4)
Output	Isolation method		Photocoupler
	Rated load voltage		5 to 24V DC
	Rated load voltage range		4.75V DC to 26.4V DC
	Max. load current		NX70: 0.1A ([II]A1 to A8, [II]B1 to B4 terminal), 0.8A ([II]B5 to B8 terminal)
	OFF state leakage current		1 μA or less
	Max. ON state voltage drop		0.5V or less
	Response time *1	OFF → ON	1 μs or less
		ON → OFF	1 μs or less
	Surge absorber		Zener diode
	Common method		16 points/COMMON
	External power supply	Voltage	20.4V DC to 26.4V DC
		Current	90 mA (for 24V DC)
Counter	Compare output		NX70: 8 points ([II] A1 to A8 terminal)
Pulse Output	Channel		NX70: 4CH ([II]B1 to B8 terminal)
	Min. output frequency *1		100 kHz
	Output mode		2 modes (direction control, individual output)
PWM Output	Number of output points		NX70: 4CH ([II]B5 to B8 terminal)
	Max. load current		0.8A
	Cycle *1		1 Hz to 30 kHz
	Duty *1		0 to 100% (1% unit)

*1 Max. load current, resistance load, and output waveform can be distorted depending on load current or type of load.

Function Specifications

Functions	Item	Pulse I/O unit (NX70-PULSE4)
Input, Output	Occupied I/O points	32 In/32 Out
	External point	16 In/16 Out
Counter	Number of channels	4CH
	Counting range	32-bit signed (-2,147,483,648 to +2,147,483,647)
	Counting speed	200 kHz *1
	Input mode	Direction control, individual input, phase input
	Special functions	Multiplication (1, 2, 4)
Comparison output	Point	Max. 8 points
Input time constant	Point	16 points (2-point unit)
	Constant	4, 8, 16, 32 μs
Pulse output	Number of channels	4CH *2
	Cycle	1 Hz to 100 kHz (Set unit 1 Hz)
	Output mode	Direction control, individual output
PWM output	Number of channels	4CH *2
	Output current	Max. 0.8A/1CH
	Duty	0 to 100% (Set unit 1%)
	Cycle	1 Hz - 30 kHz (Set unit 1 Hz)

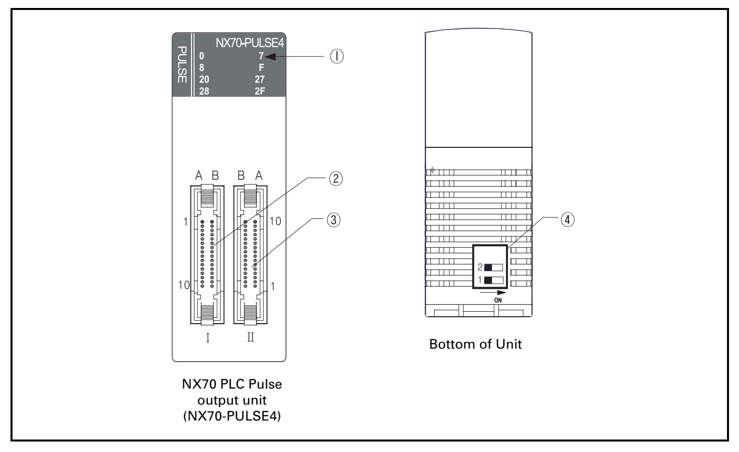
*1 This value applies when input time constant (filter) is set to N/A.

*2 Pulse output and PWM output share a common CH.
When using combined functions, refer to the table below to select functions per each CH.

Combination	Using CH			
	CH0	CH1	CH2	CH3
1	PWM	PWM	PWM	PWM
2	PLS	PWM	PWM	PWM
3	PLS	PLS	PWM	PWM
4	PLS	PLS	PLS	PWM
5	PLS	PLS	PLS	PLS

Parts and Functions

Parts and Functions



NX70 PLC Pulse output unit (NX70-PULSE4)

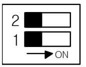
① **Status LED**
Turns on I/O status light at the terminal blocks.

② **Input Connector (NX70 PLC), [I]**
Relays input signals from an external device to the Pulse I/O unit.

③ **Output Connector (NX70 PLC), [II]**
Relays output signals from the Pulse I/O unit to an external device.

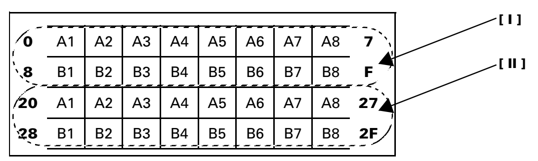
④ **Mode Setting Switch is reseved for future use**

Mode Setting Switch



Resevred

NX70 Pulse I/O unit allocation table (NX70-PULSE4)



[Unit LED Indicator Window]

NX70 Pulse I/O unit (NX70-PULSE4)

LED / Terminal		Functions					LED / Terminal		Functions				
		Input	**Counter**	**Comparison**	**Pulse**	**PWM**			**Output**	**Counter**	**Comparison**	**Pulse**	**PWM**
[I]	A1	R0.0	CH0 IN-A	-	-	-	[II]	A1	R2.0	-	**[**CMP0**]**	PLS0 direction	-
	A2	R0.1	CH0 IN-B	-	-	-		A2	R2.1	-	**[**CMP1**]**	PLS1 direction	-
	A3	R0.2	CH0 Clear	-	-	-		A3	R2.2	-	**[**CMP2**]**	PLS2 direction	-
	A4	R0.3	CH0 Mask	-	-	-		A4	R2.3	-	**[**CMP3**]**	PLS3 direction	-
	A5	R0.4	CH1 IN-A	-	-	-		A5	R2.4	-	**[**CMP4**]**	-	-
	A6	R0.5	CH1 IN-B	-	-	-		A6	R2.5	-	**[**CMP5**]**	-	-
	A7	R0.6	CH1 Clear	-	-	-		A7	R2.6	-	**[**CMP6**]**	-	-
	A8	R0.7	CH1 Mask	-	-	-		A8	R2.7	-	**[**CMP7**]**	-	-
	B1	R0.8	CH2 IN-A	-	-	-		B1	R2.8	-	-	**[**PLS0 A**]**	-
	B2	R0.9	CH2 IN-B	-	-	-		B2	R2.9	-	-	**[**PLS0 B**]**	-
	B3	R0.10	CH2 Clear	-	-	-		B3	R2.10	-	-	**[**PLS1 A**]**	-
	B4	R0.11	CH2 Mask	-	-	-		B4	R2.11	-	-	**[**PLS1 B**]**	-
	B5	R0.12	CH3 IN-A	-	-	-		B5	R2.12	-	-	**[**PLS2 A**]**	**[**PWM0**]**
	B6	R0.13	CH3 IN-B	-	-	-		B6	R2.13	-	-	**[**PLS2 B**]**	**[**PWM1**]**
	B7	R0.14	CH3 Clear	-	-	-		B7	R2.14	-	-	**[**PLS3 A**]**	**[**PWM2**]**
	B8	R0.15	CH3 Mask	-	-	-		B8	R2.15	-	-	**[**PLS3 B**]**	**[**PWM3**]**

- marks: No output allocation

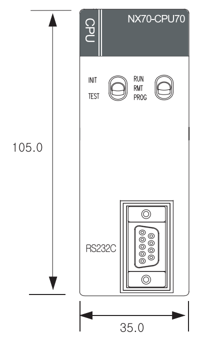
[ ] marks: Indicate the connector pins to which the comparison results are directly output in order to send to an external device.

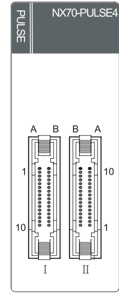


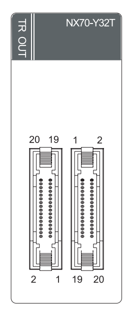


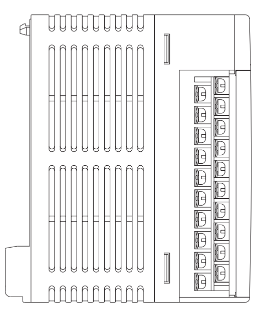
- LED indicators may show vibrations when there are high-speed I/O signals, but it does not indicate any malfunctions on the unit.
- The numbers described above are I/O numbers with Pulse I/O unit mounted in slot 0.
  I/O number can differ depending on the installation slot.

CPU, I/O, High Performance Pulse Output Module Dimensions (mm)









Installation Environment



ATTENTION

Do not install your high speed counter module if any of the following conditions are present:

- Ambient temperature outside the range of 0 to 55 °C (32 to 131 °F).
- Direct sunlight.
- Humidity outside the range of 30% to 85% (non-condensing).
- Chemicals that may affect electronic parts.
- Excessive or conductive dust, or salinity.
- High voltage, strong magnetic fields, or strong electromagnetic influences.
- Direct impact and excessive vibration.



ATTENTION

Installing Modules on the System

1. Wire I/O cables to the terminal block.
2. Turn on the field power connected to the high speed counter module.
3. Turn on the main PLC power.



ATTENTION

Removing Modules from the System

1. Turn off the main PLC power.
2. Turn off the power to the high speed counter module.
3. Remove the wirings from the terminal block.

ATTENTION

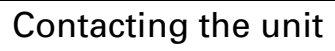


Precautions for Electrostatic

- Excessive static electricity can be generated in dry conditions, so please make sure to discharge electrostatic charges by touching a grounded metal bar before contacting the unit.

ATTENTION





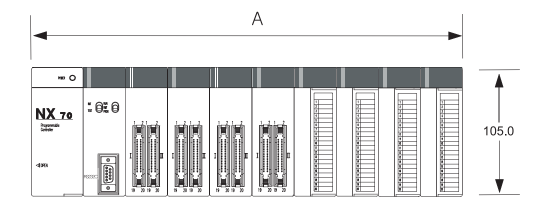
Contacting the unit

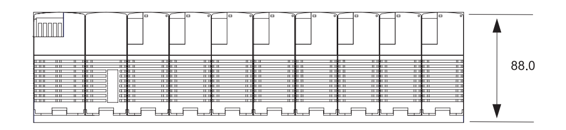
- Do not use thinners, which can damage or degrade PCB circuit board.

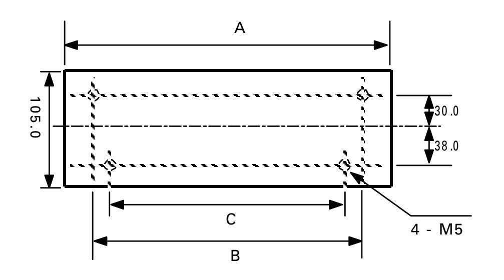
Installation

Installation Dimensions

System Dimensions (mm)







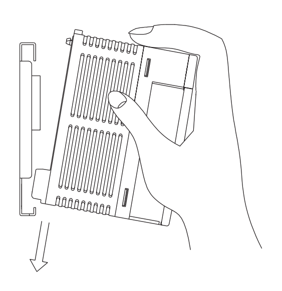
unit (mm)

Slot Types	Catalog Number	Dimensions (A)	Dimensions (B)	Dimensions (C)
2-slot type	NX70-BASE02	149.5	129.5	115.5
3-slot type	NX70-BASE03	185.0	165.0	151.0
5-slot type	NX70-BASE05	256.0	236.0	222.0
6-slot type	NX70-BASE06	291.5	271.5	257.5
8-slot type	NX70-BASE08	362.5	342.5	328.5
10-slot type	NX70-BASE10	398.0	378.0	364.0
12-slot type	NX70-BASE12	433.5	413.5	399.5

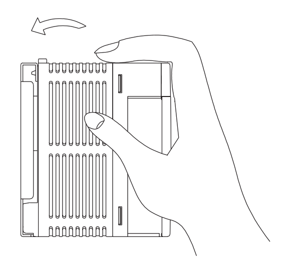
Mounting/Dismounting Module

Mounting

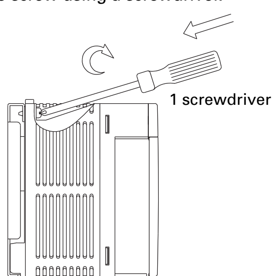
1. Insert the module by inserting the tab into the groove first and pushing the module against the backplane.



2. Push the top of the module toward the backplane until it is clamped in place.

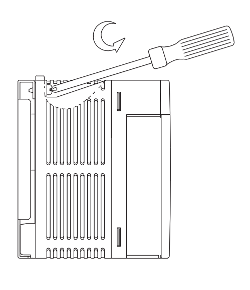


3. Ensure that the module is in place against the backplane, and then fasten the screw using a screwdriver.

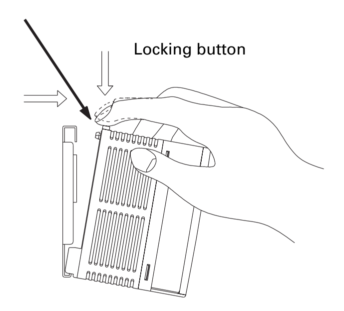


Dismounting

1. Unfasten the screw that holds the module in place using a screwdriver.

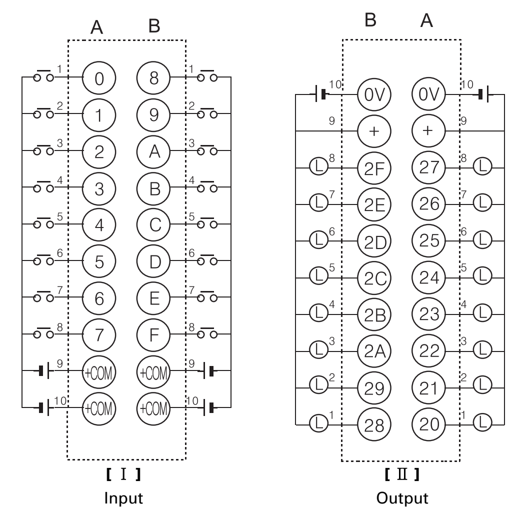


2. Hold on pressing the locking button on the top edge of the module, and pull the module from the backplane.



Wiring

Terminal Pinouts

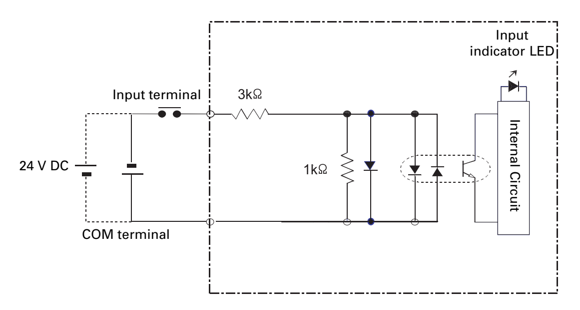


[NX70 Pulse I/O Unit (NX70-PULSE4)]

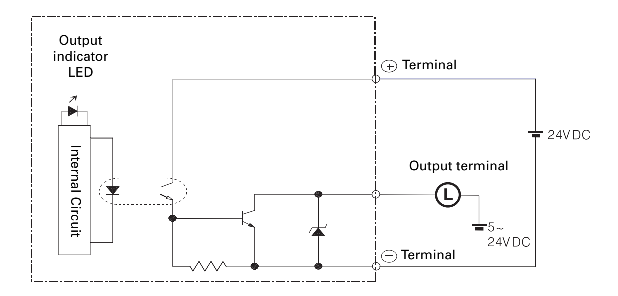
NOTE 4 (+ COM) points, 2 (+) points, and 2 (0V) points are internally connected, respectively.

Wiring Diagrams

Input part



Output part





中文

目录

重要用户信息

固态电子设备的运行特性不同于机电设备。由于存在这种差异，而且，由于固态电子设备具有各种不同的用途，因此，所有负责应用该设备的人必须自己确保，此设备的每种预期用途都是可以接受的。

在任何情况下，OE Max Controls 对因使用或应用此设备导致的间接损害或继发性损害均不承担任何责任。

本手册中包含的示例和图示只用于说明目的。由于任何特定安装都具有许多相关的可变因素和要求，因此， OE Max Controls 不对基于示例和图示的实际使用承担任何责任。

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警告

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注意



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安全说明

在安装、操作、进行检查和预防性维护之前，请通阅本手册和相关文档，并熟悉手册中的相关说明。务必正确遵循说明进行操作，以确保产品正常运转和您的安全。

警告



- 如果使用本产品的场合可能会导致人身伤害和/或使设备受到严重损坏，请采取相应的安全保护措施，如使用安全可靠的设备。
- 不要在具有爆炸性气体的任何环境中使用本产品。否则，可能会导致爆炸。

注意



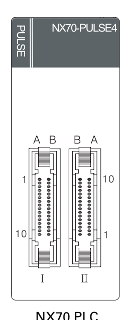
- 请用端螺栓固紧电缆。
- 不要在未达到适当环境标准的条件下使用产品。
- 确保连接接地电缆。
- 不要在电流接通时接触端子。

概述

特性

NX70 PLC 脉冲 I/O 单元是一种轻松实现脉冲输出和高速计数器功能的特殊单元。
脉冲 I/O 单元具有以下主要特性。

脉冲 I/O 单元提供如下高速计数器功能以及其他多种功能：



NX70 PLC
脉冲输出单元
(NX70-PULSE4)

- 它以组合 I/O 单元方式运行。
- 设置输入信号的有效脉冲宽度。
- 计算脉冲数。
- 对脉冲数和设定值进行比较，并输出结果。
- 脉冲输出。
- PWM 输出。

脉冲输出和 PWM 输出仅可用于脉冲 I/O 单元。请注意，该功能**不可**用于高性能高速计数器单元 (4CH)。

无损失的系统配置

没有分配给任意功能的单元 I/O 端子可用作常规 I/O 端子，使单个高速计数器单元可以同时提供计数器功能和传感器输入，从而组成没有系统资源损失的系统配置。

利用单个脉冲 I/O 单元轻松实现位置控制。

脉冲 I/O 单元提供脉冲输出功能。将输出脉冲反馈给单元，通过单个单元提供易用的位置控制。

四个 0.8A 输出

规格

性能规格列表

常规规格

项目		规格
温度	运行	0 °C 至 +55 °C （32 °F 至 131 °F）
	储存	-25 °C 至 +70 °C （-13 °F 至 158 °F）
湿度	运行	30 至 85% RH （无冷凝）
	储存	30 至 85% RH （无冷凝）
耐电压性		在每根针脚 <-> 外部连接器地线之间 500V AC 电压持续 1 分钟 （不包括 F 和 E 端子）（F 和 E 端子：连接器屏蔽电缆）
绝缘阻抗		100 MΩ 或更高 （每根针脚 <-> 外部连接器地线之间的电压为 500 MV DC） （但不包括 F 和 E 端子）（F 和 E 端子：连接器屏蔽电缆）
抗振动性		10 至 55Hz， 1 周期/分钟：双振幅 0.75 mm，在 3 轴向上持续 10 分钟 (X, Y, Z)
抗冲击性		在 X、 Y、 Z 轴每个方向上，最大加速度和承受时间：98 m/s^2 或更大 （4 次）
噪声抗扰度		1500Vp-p，脉冲宽度 50ns 至 1μs （自噪声模拟装置发出）
环境		无腐蚀性气体，无浓尘

I/O 规格

通用规格

项目	脉冲 I/O 单元 (NX70-PULSE4)
占用的 I/O 点数	输入 32 点，输出 32 点 (32SX, 32SY)
内部电流消耗	500 mA 或更小 (DC 5V)
运行指示器	32 点 LED （在接通时亮起）
外部连接方法	连接器 （一个 MIL 标准 40 针连接器）
重量	大约 130 克

输入规格

项目			脉冲 I/O 单元 (NX70-PULSE4)
输入	隔离方法		光电耦合器
	额定输入电压		24V DC
	额定输入电流		约 7.5 mA （在 24V DC 下）
	输入阻抗:		大约 3.2 KΩ
	使用电压范围		20.4V DC 至 26.4V DC
	最小接通电压 / 电流		19.2V DC/6 mA
	最大关断电压 / 电流		5.0V DC/1.5 mA
	响应时间 *1	关断 → 接通	1 μs 或更短
		接通 → 关断	2 μs 或更短
	输入时间常数设置		N/A， 4μs， 8μs， 16μs， 32μs （2 输入单元设置）
	通用方法		16 点 /Common (+Common)
计数器	计数器通道数		4 通道
	计数范围		32 位有符号整数 （-2,147,483,648 至 +2,147,483,647）
	最大计数速度 *1		200 kHz
	输入模式		3 种模式 （方向控制、单独输入、相位输入）
	最小输入脉冲宽度 *1		2.5 μs
	其他		比较输出 8 点，增倍 (1, 2, 4)

*1. 此值在输入时间常数 （滤波器）设置为 N/A 时适用。

输出规格

项目			脉冲 I/O 单元 (NX70-PULSE4)
输出	隔离方法		光电耦合器
	额定负载电压		5 至 24V DC
	额定负载电压范围		4.75V DC 至 26.4V DC
	最大负载电流		NX70：0.1A （[II] A1 至 A8 端子， [II] B1 至 B4 端子），0.8A （[II] B5 至 B8 端子）
	关断状态泄漏电流		1 μA 或更小
	最大接通状态压降		0.5V 或更低
	响应时间 *1	关断 → 接通	1 μs 或更短
		接通 → 关断	1 μs 或更短
	电涌吸收器		稳压二极管
	通用方法		16 点/COMMON
	外部电源	电压	20.4V DC 至 26.4V DC
		电流	90 mA （在 24V DC 下）
计数器	比较输出		NX70：8 点 （[II] A1 至 A8 端子）
脉冲输出	通道		NX70：4CH （[II] B1 至 B8 端子）
	最小输出频率 *1		100 kHz
	输出模式		2 种模式 （方向控制、单独输出）
PWM 输出	输出点数		NX70：4CH （[II] B5 至 B8 端子）
	最大负载电流		0.8A
	周期 *1		1 Hz 至 30 kHz
	占空比 *1		0 至 100% （单位：1%）

*1 最大负载电流、电阻负载和输出波形可能会出现扭曲，这取决于负载电流和负载类型。

功能规格

功能	项目	脉冲 I/O 单元 (NX70-PULSE4)
输入，输出	占用的 I/O 点数	32 点输入/32 点输出
	外部点	16 点输入/16 点输出
计数器	通道数	4 通道
	计数范围	32 位有符号整数 （-2,147,483,648 至 +2,147,483,647）
	计数速度	200 kHz*1
	输入模式	方向控制，单独输入，相位输入
	专用功能	增倍 (1, 2, 4)
比较输出	点	最多 8 点
输入时间常数	点	16 点 （2 点单元）
	常数	4, 8, 16, 32 μs
脉冲输出	通道数	4 通道 *2
	周期	1 Hz 至 100 kHz （设定单位 1 Hz）
	输出模式	方向控制，单独输出
PWM 输出	通道数	4 通道 *2
	输出电流	最大 0.8A/1CH
	占空比	0 至 100% （设定单位 1%）
	周期	1 Hz 至 30 kHz （设定单位 1 Hz）

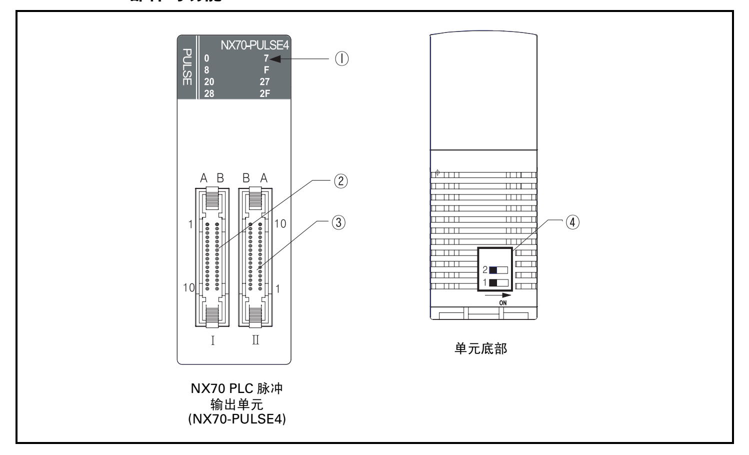
*1 此值在输入时间常数 （滤波器）设置为 N/A 时适用。

*2 脉冲输出和 PWM 输出共用一个通道。
使用组合功能时，请参照下表根据每个通道选择功能。

组合	使用的通道			
	CH0	CH1	CH2	CH3
1	PWM	PWM	PWM	PWM
2	PLS	PWM	PWM	PWM
3	PLS	PLS	PWM	PWM
4	PLS	PLS	PLS	PWM
5	PLS	PLS	PLS	PLS

部件与功能

部件与功能



NX70 PLC 脉冲
输出单元
(NX70-PULSE4)

单元底部

① **状态 LED**

打开端子块上的 I/O 状态指示灯。

② **输入连接器 (NX70 PLC)，[I]**

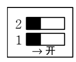
将输入信号从外部设备传递给脉冲 I/O 单元。

③ **输出连接器 (NX70 PLC)，[II]**

将输出信号从脉冲 I/O 单元传递给外部设备。

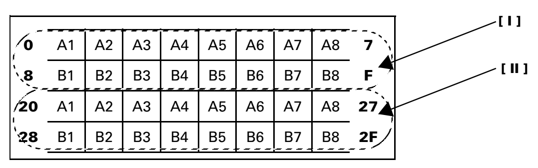
④ **保留模式设置开关供将来使用**

模式设置开关



保留

NX70 脉冲 I/O 单元分配表 (NX70-PULSE4)



[单元 LED 指示灯窗口]

NX70 脉冲 I/O 单元 (NX70-PULSE4)

LED	端子	功能：输入	功能：计数器	功能：比较	功能：脉冲	功能：PWM	LED	端子	功能：输出	功能：计数器	功能：比较	功能：脉冲	功能：PWM
[I]	A1	R0.0	CH0 IN-A	-	-	-	[II]	A1	R2.0	-	[CMP0]	PLS0 方向	-
	A2	R0.1	CH0 IN-B	-	-	-		A2	R2.1	-	[CMP1]	PLS1 方向	-
	A3	R0.2	CH0 清除	-	-	-		A3	R2.2	-	[CMP2]	PLS2 方向	-
	A4	R0.3	CH0 屏蔽	-	-	-		A4	R2.3	-	[CMP3]	PLS3 方向	-
	A5	R0.4	CH1 IN-A	-	-	-		A5	R2.4	-	[CMP4]	-	-
	A6	R0.5	CH1 IN-B	-	-	-		A6	R2.5	-	[CMP5]	-	-
	A7	R0.6	CH1 清除	-	-	-		A7	R2.6	-	[CMP6]	-	-
	A8	R0.7	CH1 屏蔽	-	-	-		A8	R2.7	-	[CMP7]	-	-
	B1	R0.8	CH2 IN-A	-	-	-		B1	R2.8	-	-	[PLS0 A]	-
	B2	R0.9	CH2 IN-B	-	-	-		B2	R2.9	-	-	[PLS0 B]	-
	B3	R0.10	CH2 清除	-	-	-		B3	R2.10	-	-	[PLS1 A]	-
	B4	R0.11	CH2 屏蔽	-	-	-		B4	R2.11	-	-	[PLS1 B]	-
	B5	R0.12	CH3 IN-A	-	-	-		B5	R2.12	-	-	[PLS2 A]	[PWM0]
	B6	R0.13	CH3 IN-B	-	-	-		B6	R2.13	-	-	[PLS2 B]	[PWM1]
	B7	R0.14	CH3 清除	-	-	-		B7	R2.14	-	-	[PLS3 A]	[PWM2]
	B8	R0.15	CH3 屏蔽	-	-	-		B8	R2.15	-	-	[PLS3 B]	[PWM3]

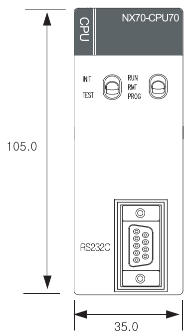
- 标记：无输出分配
[ ] 标记：指示为将比较结果发送给外部设备而直接输出结果的连接器针脚。

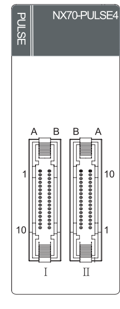
注意

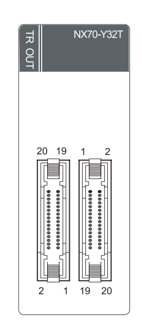


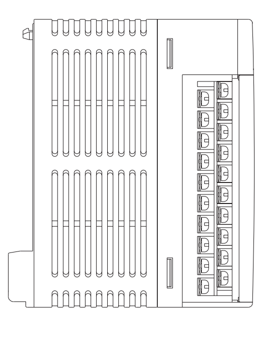
- 如果有高速 I/O 信号， LED 指示器会显示振动，但不会指明单元出现任何失灵故障。
- 上述编号是安装在插槽 0 中的脉冲 I/O 单元的 I/O 编号。I/O 编号会因不同的安装插槽而不同。

CPU、I/O、高性能脉冲输出模块尺寸（毫米）



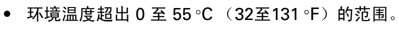




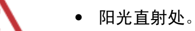


安装环境

注意	下列任何场合都不适合安装高速计数器模块：



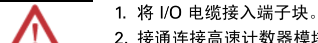
- 环境温度超出 0 至 55 °C （32至131 °F）的范围。



- 阳光直射处。
- 湿度超出 30% 至 85% （无冷凝）的范围。
- 周围存在可能影响电子器件的化学品。
- 浓尘场所或存在导电尘埃或含盐物质的场所。
- 受高电压、强磁场或强电磁影响的场所。
- 直接碰撞和剧烈振动。

注意

在系统上安装模块



1. 将 I/O 电缆接入端子块。
2. 接通连接高速计数器模块的现场电源。
3. 接通主 PLC 电源。

注意



从系统中拆卸模块



1. 关断主 PLC 电源。
2. 关断连接高速计数器模块的电源。
3. 从端子块中拔下接线。

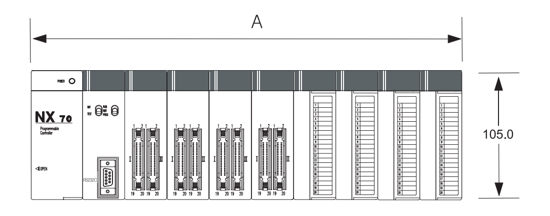
注意 	静电预防措施 • 由于在干燥条件下会产生多余静电，在接触这些单元前，请务必先用手触摸接地的金属物体来释放静电。

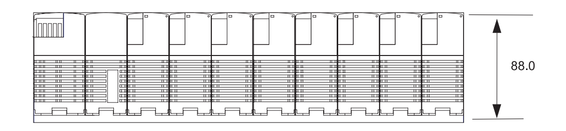
注意 	接触单元 • 不要适用稀释剂，否则会损坏 PCB 电路板或造成性能下降。

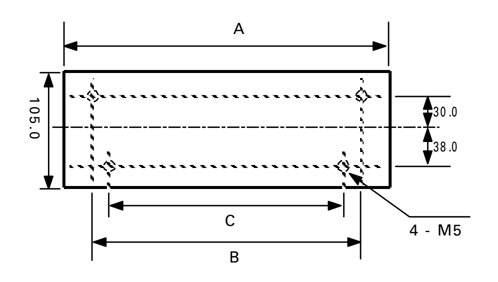
安装

安装尺寸

系统尺寸 （毫米）







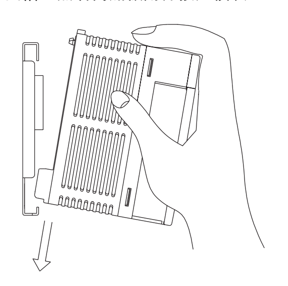
单位 （毫米）

插槽类型	目录号	尺寸 (A)	尺寸 (B)	尺寸 (C)
2 插槽型	NX70-BASE02	149.5	129.5	115.5
3 插槽型	NX70-BASE03	185.0	165.0	151.0
5 插槽型	NX70-BASE05	256.0	236.0	222.0
6 插槽型	NX70-BASE06	291.5	271.5	257.5
8 插槽型	NX70-BASE08	362.5	342.5	328.5
10 插槽型	NX70-BASE10	398.0	378.0	364.0
12 插槽型	NX70-BASE12	433.5	413.5	399.5

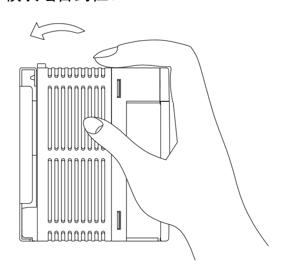
安装/拆卸模块

安装

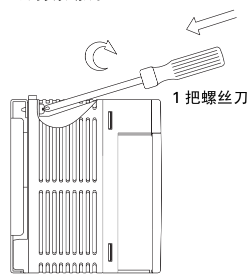
1. 插入模块的方法是：首先将卡舌插入凹槽，然后向底板用力按压模块。



2. 正对着底板方向用力推模块顶部，直到模块啮合到位。

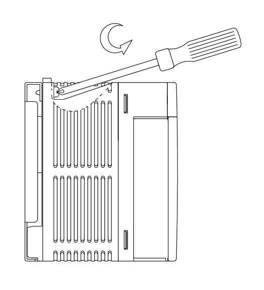


3. 确保模块正确安放在底板上，然后使用螺丝刀拧紧螺钉。

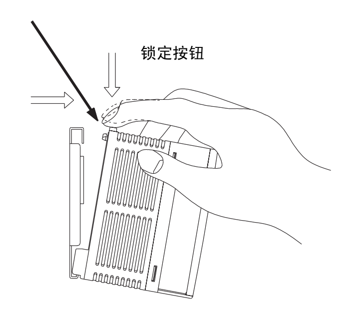


拆卸

1. 使用螺丝刀拧开用于固定模块的螺钉。

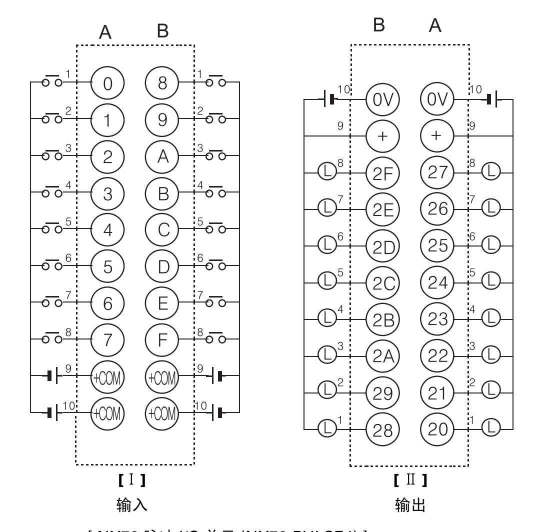


2. 按住位于模块顶侧边缘上的锁定按钮，从底板中拔出模块。



接线

端子插脚引线

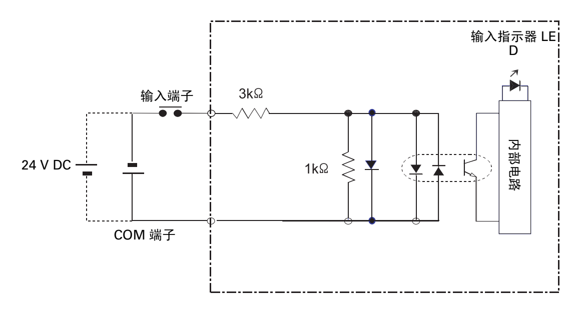


[NX70 脉冲 I/O 单元 (NX70-PULSE4)]

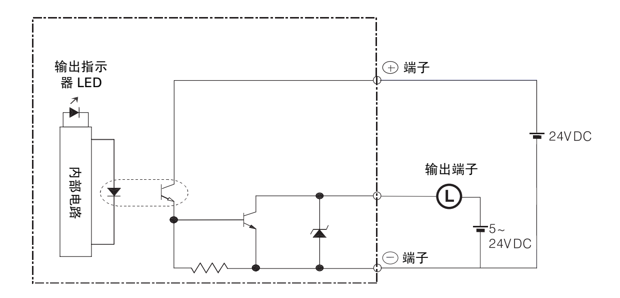
注 4 (+ COM) 点、 2 (+) 点和 2 (0V) 点分别在内部相连。

接线图

输入部分



输出部分





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